

Ames Laboratory
Office Safeguards and Security
Title Site Security Plan
Page 1 of 19

Plan 10200.007
Revision 6
Effective Date 7/15/05
Review Date 7/15/07

SITE SECURITY PLAN

This plan depicts the existing conditions at the Ames Laboratory and describes the protection programs utilized to ensure an appropriate level of security for the site and associated activities.

Comments and questions regarding this plan should be directed to:

Name: Tom E. Wessels
Safeguards and Security Program Director
Address: G 40 TASF
Phone: 515-294-4965

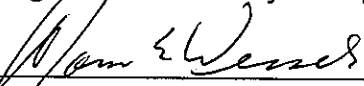
SIGN-OFF RECORD:

Approved by:


Safeguards and Security Manager

Date: 7/14/05

Approved by:


S&S Program Director/ESH&A Manager


Date: 7-14-05

Approved by:


Facility Manager/Chief Operations Officer

Date: 7-14-05

Reviewed by:


Deputy Director

Date: 7-14-05

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	2 of 19	Review Date	7/15/07

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
1.0 REVISION/REVIEW LOG.....	4
2.0 PURPOSE AND SCOPE	4
3.0 ORGANIZATION AND PLANNING.....	8
3.1 Facility Description and Mission.....	8
3.2 General Description of DOE Property.....	9
3.3 Staff Organization.....	10
3.4 Staff Responsibilities.....	10
3.5 Foreign Visits and Assignments General Security Plan.....	12
4.0 PHYSICAL SECURITY	13
4.1 General Description - Site.	13
4.2 Physical Barriers	14
4.3 Intrusion Detection System	15
4.4 Access Control/Protection Procedures	15
4.5 Site Vulnerability Assessment.....	16
4.6 Badging Program.....	16
5.0 SECURITY FORCE AND CONTINGENCY PLANNING	17
5.1 Security Force	17
5.2 Standard Protection Procedures	17
5.3 SECON and Other Responses	18
5.4 Contingency Planning.....	18
6.0 STATUS, PLANNED IMPROVEMENTS AND CHANGE CONTROL	19
6.1 Status	19
6.2 Change Control.....	19

ATTACHMENTS

Attachment A - Ames Laboratory Organizational Charts

Attachment B - Ames Laboratory Current Use Map

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	3 of 19	Review Date	7/15/07

EXECUTIVE SUMMARY

This Site Security Plan describes the practices and resources utilized to protect the government-owned facilities, equipment and other resources at the Ames Laboratory from loss or damage due to intrusion, theft, fire or other threats.

The Laboratory is operated by Iowa State University and located on its campus. The operations of the Laboratory are conducted in both federally-owned and University-owned buildings. In addition to its permanent staff, the Laboratory benefits from the scientific contributions made by jointly appointed faculty members and ISU graduate students. The Laboratory also benefits from extensive scientific and technical cooperation with several of the University's Colleges and major research Centers.

The integration of the Laboratory with the facilities and activities of the University necessitates the maintenance of an open site, yet one that is managed so that neither the work nor the property is placed at risk. Ames Laboratory, Iowa State University, the Ames Area Office and DOE-CH have developed an innovative program for accomplishing these objectives and addressing security requirements.

Ames does not conduct classified research and has no classified information. The Laboratory does not have a classified mailing address and does not maintain security clearances for its staff members. The Laboratory collects limited data regarding visiting or assigned foreign nationals and makes these data available to appropriate DOE offices by entering the data in the DOE Foreign Access Central Tracking System (FACTS) database.

Ames conducts minimal research efforts involving unclassified work with small quantities of Category IV special nuclear materials and therefore has implemented an approved Nuclear Materials Control and Accountability Plan.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	4 of 19	Review Date	7/15/07

1.0 REVISION/REVIEW LOG

This document will be reviewed every two years as a minimum.

<u>Revision Number</u>	<u>Effective Date</u>	<u>Contact Person</u>	<u>Pages Affected</u>	<u>Description of Revision</u>
0	1/1/98	T. Wessels	All	Original document
1	8/1/00	D. Baldwin	Most	Updates, G:\Docs&Rec\DCP\Revision Description\Plan 10200.007 rev 1 revdesc
2	2/1/02	T. Wessels	Most	Updates, G:\Docs&Rec\DCP\Revision Description\Plan 10200.007 rev 2 revdesc
3	5/1/03	T. Wessels	Most	Updates, G:\Docs&Rec\DCP\Revision Description\Plan 10200.007 rev 3
4	6/1/03	T. Wessels	Several	Updates, G:\Docs&Rec\DCP\Revision Description\Plan 10200.007 rev 4
5	9/26/03	T. Wessels	Sec. 3.5	Added Section 3.5, G:\Docs&Rec\DCP\Revision Description\Plan 10200.007 rev 5
6	7/15/05	T. Wessels	Most	G:\Docs&Rec\DCP\Revision Description\Plan 10200.007 rev 6

2.0 PURPOSE AND SCOPE

The nature of the research conducted at Ames, the broad dissemination of the results of this research via unrestricted publication in national and international scientific (refereed) journals, and the integration with Iowa State University justifies the maintenance of an open site. As an open site, Ames Laboratory is managed so that neither the work nor property is placed at risk. The Laboratory's safeguards and security efforts have been developed through a graded approach to address the objectives of applicable DOE Safeguards and Security Directives, and to promote the type of research interactions essential to the Ames Laboratory and DOE missions.

Safeguards and Security related directives applicable to Ames Laboratory include the following:

DOE O 142.3

Unclassified Foreign Visits and Assignments

This order defines a program for unclassified foreign national access to Department of Energy sites, information, and technologies. Visits and assignments are conducted in a manner consistent with U.S. and DOE national security policies, requirements and objectives including export control laws and regulations. The Laboratory requires sponsors to gather appropriate data on their visitors for the DOE foreign visits and assignments database. The Headquarters Management Team approves visits by foreign nationals from State Sponsors of Terrorism. The Laboratory Director or his designee, the Chief Operations Officer, approves all other visits. Once approved the visitor is allowed on site in accordance with the December 2002 guidance. Indices checks are performed on all foreign visitors. Certain federal agencies are also notified on a quarterly basis as to the foreign visitors at Ames Laboratory. The Ames Laboratory contact for DOE N 142.1 is the Chief Operations Officer.

Ames Laboratory	Plan	10200.007
Office Safeguards and Security	Revision	6
Title Site Security Plan	Effective Date	7/15/05
Page 5 of 19	Review Date	7/15/07

- DOE O 151.1B *Comprehensive Emergency Management System*
Elements of the Laboratory's emergency management program are documented in the Ames Laboratory Emergency Plan (Plan 46300.001). The Ames Laboratory contact for DOE O 151.1B is the Facilities Services Manager.
- DOE P 205.1 *Departmental Cyber Security Management Policy*
DOE O 205.1 *Department of Energy Cyber Security Management Program*
The Departmental Cyber Security Management (DCSM) Policy was developed to further clarify and support the elements of the Integrated Safeguards and Security Management (ISSM) Policy regarding cyber security. The purpose of the DOE Cyber Security Management Program is to protect all DOE cyber information and information systems in order to implement the requirements of applicable laws required to maintain national security and ensure DOE business operations proceed without security events such as interruption or compromise. The Laboratory's Cyber Security Program and requirements are documented in the Ames Laboratory Cyber Security Program Plan (CSPP) [Plan 50000.002]. The Ames Laboratory contact for DOE P 205.1 and O 205.1 is the Laboratory's Computer Protection Program Manager.
- DOE P 470.1 *Integrated Safeguards and Security Management (ISSM) Policy*
The purpose of this Policy is to formalize an Integrated Safeguards and Security Management (ISSM) framework. Safeguards and security management systems provide a formal, organized process for planning, performing, assessing, and improving the secure conduct of work in accordance with risk-based protection strategies. These systems are institutionalized through DOE directives and contracts. The implementation of this policy is documented through the Plan 10200.029 *Ames Laboratory Integrated Safeguards and Security Management System Description*. The Ames Laboratory contact for DOE P 470.1 is the ESH&A Manager.
- DOE O 470.1 Chg 1 *Safeguards and Security Program*
The Ames Laboratory contact for DOE O 470.1 is the Safeguards & Security Program Director. The Laboratory's program is primarily documented in the Ames Laboratory Site Security Plan (Plan 10200.007). Ames Laboratory was granted a variance from the requirements of DOE Order 470.1, "Safeguards and Security Program", Chapter II, "Safeguards and Security Training Program", Paragraph 3, Subparagraph f: "The Training Approval Program (TAP)" on September 2, 2004.
- DOE O 470.2B *Independent Oversight And Performance Assurance Program*
The Independent Oversight Program is designed to enhance the DOE safeguards and security; cyber security; emergency management; and environment, safety, and health programs by providing DOE and contractor managers, Congress, and other stakeholders with an independent evaluation of the adequacy of DOE policy and the effectiveness of line management performance in safeguards and security; cyber security; emergency management; environment, safety, and health; and other critical functions as directed by the Secretary. The Office of Independent Oversight and Performance Assurance (OA) has responsibility for independent oversight of safeguards and security, cyber security, emergency management, and ES&H programs. Ames Laboratory has responsibility of supporting OA appraisals. The Ames Laboratory contact for DOE O 470.2B is the ESH&A Manager.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	6 of 19	Review Date	7/15/07

- DOE O 471.3 *Identifying and Protecting Official Use Only Information*
The Order is designed to establish a program within DOE, including the National Nuclear Security Administration (NNSA), to identify certain unclassified controlled information as Official Use Only (OUO) and to identify, mark, and protect documents containing such information. The Ames Laboratory contact for DOE O 471.3 is the ESH&A Manager.
- DOE O 471.4 *Incidents of Security Concern*
The Order sets forth requirements for the DOE Incidents of Security Concern Program, including timely identification and notification of, response to, inquiry into, reporting of, and closure actions for incidents of security concern. Ames Laboratory utilizes its Event Reporting Plan (40000.001) to ensure appropriate reporting of security related incidents. The Ames Laboratory contact for DOE O 471.4 is the ESH&A Manager.
- DOE O 473.1 *Physical Protection Program*
DOE M 473.1-1 Physical Protection Program activities are provided at a graded level commensurate with the site's low level of potential threats and risks. The Laboratory Plant Protection Section functions as a security force, supplemented through a memorandum of understanding (MOU) for assistance response from ISU's Department of Public Safety. The protective personnel requirements of the Protective Force Program order and manual and related portions of 10 CFR 1046 are not applicable to Ames Laboratory. Ames Laboratory was granted a graded implementation to DOE O 473.1 and DOE M 473.1-1 to exclude reference to the requirements of DOE O 473.2, *Protective Force Program*, and DOE M 473.2, *Protective Force Manual*. The Ames Laboratory contact for DOE O 473.1 is the Physical Security and Plant Protection manager.
- DOE N 473.9 *Security Conditions*
This Notice ensures that DOE uniformly meets the requirements of the Homeland Security Advisory System outlined in Homeland Security Presidential Directive-3, Threat Conditions and Associated Protective Measures, dated 3-11-02, and provides responses specified in Presidential Decision Directive 39, U.S. Policy on Counterterrorism (U), dated 6-21-95. It cancels DOE N 473.8, Security Conditions, dated 8-7-02. Ames Laboratory has developed graded implementation guidelines in response to DOE Security Conditions (SECON). The Ames Laboratory contact for DOE O 473.4 is the ESH&A manager.
- DOE O 474.1A *Control and Accountability of Nuclear Materials*
To prescribe DOE requirements, including those for the NNSA, for nuclear material control and accountability (MC&A) for DOE-owned and -leased facilities and DOE-owned nuclear materials at other facilities that are exempt from licensing by the Nuclear Regulatory Commission (NRC). Ames Laboratory has an approved Material Control and Accountability Program Plan that describes the basic requirements, control, accountability and reporting of nuclear material inventory and transactions. Ames provides quarterly inventory reports to DOE-CH and the Nuclear Materials Management and Safeguard Systems (NMMSS). Any reportable quantity transactions are documented as required by the Order and submitted to NMMSS within the required reporting timeframes. The Ames Laboratory contact for DOE O 474.1A is the Nuclear Materials Representative (also the Radiation Safety Officer).

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	7 of 19	Review Date	7/15/07

- DOE O 551.1B *Official Foreign Travel*
Foreign travel procedures are in place at Ames Laboratory, consistent with DOE Order 551.1A, *Official Foreign Travel*. Foreign travel requests are approved or recommended for approval by the Laboratory Director or the Laboratory Director designee (Chief Operations Officer) in accordance with the Order. The Ames Laboratory contact for DOE O 551.1A is the Chief Operations Officer.
- DOE O 5660.1B *Management of Nuclear Materials*
Ames Laboratory submits an annual Nuclear Material Inventory Assessment to the Chicago Operations Office. The annual assessment of inventory identifies nuclear materials excess to the laboratory programs and attempts to adjust the inventory to the needs of the programs. The Ames Laboratory contact for DOE O 5660.1B is the Nuclear Materials Representative (also the Radiation Safety Officer).
- DOE O 475.1 *Counterintelligence Program*
Due to the nature of work at the Ames Laboratory, counterintelligence activities occur in the form of briefings/debriefings and communications with DOE and other federal agencies. As a briefing, travelers going to foreign countries are supplied with country alert information obtained from the DOE Foreign Travel system. Travelers are required to provide a trip report for all foreign travel and Laboratory management reviews the reports. Copies of the trip reports (for foreign travel) are provided to the appropriate offices at DOE-CH for review. Trip reports and foreign visits and assignments information are also provided to other federal agencies as requested for periodic review. The Ames Laboratory contact for DOE O 475.1 is the Chief Operations Officer.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	8 of 19	Review Date	7/15/07

3.0 ORGANIZATION AND PLANNING

3.1 Facility Description and Mission

The Ames Laboratory is a government-owned, contractor-operated national laboratory of the United States Department of Energy's Office of Science. Iowa State University is the contractor and the Laboratory is physically located on the University campus. The majority of the Laboratory's principal investigators hold joint appointments as faculty members in departments that correspond with their scientific disciplines. Furthermore, a major contribution to the Laboratory's technical effort is made by the approximately 150 Iowa State University graduate students who work at the Laboratory at any given time and who are appointed to Laboratory-supported research assistantships. In addition, there are approximately 65 graduate-student associates who work in the Laboratory's research programs but whose financial assistance (stipends) comes from other sources. The Ames Laboratory conducts no classified research, there is no classified information on the site, and no classified information will be received on site.

The Laboratory's mission is to provide key advances in materials science research, especially in materials theory, synthesis and characterization, of benefit to DOE missions. Ames Laboratory is noted for its Materials Preparation Center, which provides the highest purity materials to the research community, for catalytic science, and for development of pioneering analytical instrumentation and techniques. The Laboratory has two business lines: "Fundamental Materials Research" and "Analytical Techniques and Instrument Development." While there are other extremely strong programs in the Ames Laboratory, such as applied mathematics and computational chemistry, they are viewed as supportive to the Laboratory's main business lines. Although the two business lines are clearly distinct, they are also symbiotic, for it is the need to know the purity, the structure, the states of aggregation, etc. of new materials that often drives the need to develop new analytical techniques and instrumentation.

The Ames Laboratory makes the results of its research programs and the consequent technological developments available to the broadest possible spectrum of domestic industrial and private sector recipients through a variety of technology transfer mechanisms and external interactions. This is done to stimulate local, regional and national economic development through the commercialization of new technologies based on the scientific accomplishments of the Laboratory. Our technology transfer program provides support to the Laboratory's researchers for Work-for-Others projects, Cooperative Research and Development Agreements, Technical Assistance Projects or other approved technology transfer mechanisms. The technology transfer program is aided by the privately funded technology transfer activities of the ISU Research Foundation (ISURF) and ISU's Office of Intellectual Property and Technology Transfer (OIPTT) in the patenting and licensing of the Laboratory's inventions.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	9 of 19	Review Date	7/15/07

3.2 General Description of DOE Property

The integration of the Ames Laboratory with the buildings and activities of Iowa State University has significant implications for site security planning and site utilization. For example, streets and street lighting, parking and traffic control, railway spurs, general infrastructure, landscaping and grounds maintenance, the telecommunications system, ordinary waste disposal, and utilities are provided or maintained by the University, either against the Contractor's overhead fee or on a direct charge basis.

Ames Laboratory operates in government-owned buildings that are located on approximately 10 acres of University land that has been leased to the Federal government on a long-term (99 year) basis. The Laboratory occupies approximately 325,000 gsf in government-owned buildings. Over 70% of this space is contained in 3 major research-use buildings built between 1949 and 1960. An office-use building (less than 15% of total) was built in 1994 which consolidated most administrative and support functions in one location for improved efficiency, allowing space in other buildings to be redirected to research activities, and decreasing space rented from the University. The balance of the space is contained in several small auxiliary buildings constructed primarily during the 1960's. These buildings provide space for support functions such as storage, records handling and storage, material receiving areas, warehouse functions and shop facilities. The Laboratory is integrated into the ISU campus in such a way that ISU provides and maintains the site-wide infrastructure (e.g. heating plant, chilling plant, roads, etc.). In addition to space in the Federally-owned buildings, the Laboratory also utilizes space in University-owned buildings adjacent to the main site for research activities.

Ames Laboratory Buildings			
Building	Date	Area (gsf)	Description and usage
Spedding Hall	1953	107,630	Laboratory building housing research activities and central storeroom space.
Metals Development Building	1961	69,663	Laboratory building housing research activities, electronics shop, machine shop and engineering offices.
Wilhelm Hall	1949	56,541	Laboratory building housing research activities.
TASF	1994	46,991	Office building housing management, administrative and technical support groups.
Warehouse	1966	16,506	Warehouse building housing materials handling, storage and shipping/receiving activities.
Mechanical Maintenance Building	1964	8,540	Service building housing vehicle/equipment storage and shop facilities.
Maintenance Shops Building	1967	7,503	Service building housing craft shop activities.
Paint and Air Conditioning Shop	1968	4,954	Service building housing craft shop activities.
Construction Storage Shed	1967	4,398	Service building for storage of construction materials.
Record Storage Facility	1948	1,679	Service building for document and records storage.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	10 of 19	Review Date	7/15/07

3.3 Staff Organization

The Ames Safeguards and Security Oversight Committee consists of the Safeguards and Security (S&S) Program Director (Chairman), the S&S Manager, the S&S Assistant Manager, the Facility Manager, the Deputy Director, the Export Control Officer, the Manager of Physical Security and Plant Protection, the Emergency Coordinator, the Nuclear Materials Representative and the Manager of Cyber Security. The incumbents of these positions are listed in the following table. The managers of physical security, cyber security, and NM accountability are directly responsible for the operations of their respective areas as outlined in pertinent orders, policies, and plans. The reporting relationships of positions are depicted in the Safeguards and Security Organization Chart, Attachment A.

Safeguards and Security Oversight Committee

Safeguards and Security Program Director (Chairman)	Tom E. Wessels	(515) 294-4965
Safeguards and Security Manager	Dr. David P. Baldwin	(515) 294-2069
Safeguards and Security Assistant Manager	Tom E. Wessels	(515) 294-4965
Facility Manager, COO, Counterintelligence POC	Mark Murphy	(515) 294-3979
Deputy Director	Dr. Bruce N. Harmon	(515) 294-5772
Export Control Officer	Debra L. Covey	(515) 294-1048
Physical Security and Plant Protection	Gareld P. Jones, Jr.	(515) 294-4161
Emergency Coordinator	Mark E. Grootveld	(515) 294-7895
	Off-Hours	(515) 294-3483
Nuclear Materials Representative	Mike McGuigan	(515) 294-7922
Cyber Security	Chris Strasburg	(515) 294-7955
	Mark Clarridge	(515) 294-6396

3.4 Staff Responsibilities

Safeguards and Security Program Director: The Safeguards and Security Program Director has responsibility for the overview of the DOE Safeguards and Security budgetary and programmatic issues, development of the Site Security Plan, and communication of the Laboratory's S&S program to DOE officials (shared responsibility with Safeguards and Security Manager).

Safeguards and Security Manager: The Safeguards and Security Manager has responsibility for the overview of the DOE Safeguards and Security requirements and communication of the Laboratory's S&S program to DOE officials (shared responsibility with Safeguards and Security Program Director)

Safeguards and Security Assistant Manager: The S&S Assistant Manager acts for the Manager in his absence, acts as the Event Reporting Officer and has management responsibility for the Plant Protection Section and Nuclear Materials Accountability activities as the Manager of the Environment, Safety, Health and Assurance office.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	11 of 19	Review Date	7/15/07

Facility Manager and Chief Operations Officer (COO): The COO oversees the Laboratory's Foreign Travel Program and the Unclassified Foreign Visits and Assignments Program. In this capacity the COO reviews DOE orders, notices and guides and defines the Laboratory procedures for these programs. The COO serves as the approving official for the Laboratory for foreign travel and foreign visits and assignments. The COO works with the Export Control Officer to incorporate the requirements of the Export Control Program into the Foreign Travel and the Unclassified Foreign Visits and Assignments Programs. As the Facility Manager, the Chief Operations Officer is responsible for offsite notifications resulting from emergencies, and is in command of the Emergency Operations Center whenever the Emergency Coordinator is not present.

Counterintelligence POC: The COO has been designated as the Laboratory's Counterintelligence Point of Contact (POC). The Laboratory and DOE-CH have put in place an MOU for Ames and DOE-CH to work together to perform the counterintelligence function for the Laboratory. Ames will provide information on foreign travel, foreign visits and assignments, sensitive subjects lists, WFO and CRADA agreement information, report occurrences, and work with other federal agencies as needed. DOE-CH will provide training, briefings, debriefings, investigations, indicies checks, and advice and assistance as needed. The Laboratory's counterintelligence program is consistent with the perceived risk for the personnel and information at our site. Investigators at the Laboratory are reminded of the importance to protect research findings until intellectual property issues can be handled. Hosts of foreign visitors are reminded to review the information that will be shared with visitors for its sensitivity and possible export control issues. Travelers to foreign countries are provided with foreign travel alerts that are issued through the DOE's foreign travel system. Travelers to foreign countries are required to submit trip reports at the conclusion of the trip. These reports are reviewed for inappropriate contacts with foreign nationals and incidents that may be of interest to counterintelligence.

Deputy Director: The Deputy Director has oversight responsibilities for the S&S responsibilities of the Safeguards and Security Program Director and the Cyber Security Manager.

Export Control Officer: While the Laboratory's major thrust is fundamental research conducted to advance general knowledge, practical applications can or may develop from this research. These applications may be sensitive and subject to export control. The manager of the Office of Industrial Outreach & Technology Administration is also the Export Control Officer at Ames. This position interprets export control guidance and establishes requirements for research activities at Ames Laboratory. These roles and responsibilities are coordinated with the Laboratory's requirements for foreign visits and assignments, foreign travel, licensing of Ames technologies, and CRADA and WFO agreements. The Export Control Officer is a member of the Export Control Coordinators' Organization (ECCO), comprised of DOE, DOE contractors and subcontractors.

Physical Security and Plant Protection: The Physical Security and Plant Protection Manager has responsibilities for supervision of the Plant Safety Patrol Officers and Sergeants and the Plant Protection Section of the Environment, Safety, Health and Assurance office. These responsibilities

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	12 of 19	Review Date	7/15/07

include: editing the General, Post and Special Orders; evaluating the print-outs and day sheets and logs of tours and actions; representing the Plant Protection Section on the Emergency Committee; establishing policy for emergency door postings for responders; and maintaining and evaluating electronics and software for Simplex/Motorola systems. In addition, the Physical Security and Plant Protection Manager is involved with other physical security issues such as: assessing physical security (door closed/locked, door monitoring); advising on practice; reporting violations; recording and reporting thefts; and reviewing results of property inventories.

Emergency Coordinator: The Emergency Coordinator is responsible for coordinating emergency response, including integration of off-site responders with the in-house Emergency Team. The Emergency Coordinator directs and commands all Ames Laboratory emergency responses, and coordinates and assists the emergency response of all offsite responders (ISU Department of Public Safety, Ames Fire and Police Department, Mary Greeley Ambulance). The Emergency Coordinator is also responsible for keeping the Facility Manager fully informed and apprised of the situation so that the Facility Manager can make the appropriate off-site notifications. Other responsibilities are described in the Ames Laboratory Emergency Plan.

Nuclear Materials Representative: The Nuclear Materials Representative (NMR) is responsible for tracking nuclear materials inventories, documenting nuclear materials transactions, issuing periodic reports, and assisting with the detection of unauthorized access, data falsification, and materials gains or losses. NMR responsibilities have been assigned to the ESH&A Office.

Cyber Security Manager: Following guidance from DOE Unclassified Cyber Security directives, the cyber security manager is responsible for the maintenance of the Ames Laboratory Cyber Security Program Plan. The operations responsibilities include installation and maintenance of a cyber security architecture that includes boundary protection (firewalls and intrusion detection), network management, network scanning and analysis tools, virus detection tools, and centralized incident reporting and response.

3.5 Foreign Visits and Assignments General Security Plan

DOE Order 142.3, Unclassified Foreign Visits and Assignments, requires two types of security plans to be used to control visits and assignments by foreign nationals to Ames Laboratory. A Specific Security Plan (Form 10200.142) is required when a foreign visitor or assignee is from:

1. a sensitive country or is accessing sensitive information where the host has a DOE access authorization,
2. a sensitive country accessing sensitive information, or
3. a terrorist supporting country.

All other foreign visits and assignments require a General Security Plan. The Ames Laboratory Site Security Plan is the General Security Plan for the foreign visits and assignments program.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	13 of 19	Review Date	7/15/07

4.0 PHYSICAL SECURITY

4.1 General Description - Site

As detailed in the previous section, the buildings of the Ames Laboratory are located in the northern section of the Iowa State University campus in Ames, Iowa. The Laboratory occupies four major federally-owned buildings on Pammel Drive and leases additional space, primarily in adjacent University buildings. Laboratory support buildings are also federally owned and are located on the north edge of the Laboratory site (see Attachment B). All buildings are permanent structures of brick, brick and steel, or concrete. The construction methods utilized at the Ames Laboratory site are compatible with the maintenance of an effective security program. All federally owned buildings are under the control of the Facility Manager and that person's staff. The buildings at the Ames Laboratory site and their respective uses are listed below. Floor plans giving detailed layout are available upon request.

- TASF – directors' offices, administrative offices, computer system and management offices, Occupational Medicine, and the Plant Protection Section headquarters.
- Spedding Hall – research laboratories, offices and storeroom.
- Wilhelm Hall – research laboratories and offices.
- Metals Development Building – Research laboratories and offices, Engineering and Facilities Services offices, and machine and electronics shops.
- Zaffarano Physics Addition* – research laboratories and offices.
- Office and Laboratory Building* – research laboratories and offices.
- Gilman Hall* – research laboratories and offices.
- Applied Sciences Center site* – research laboratories and offices- storage of small quantities of low-level radiological waste in the Waste Handling Facility.
- Records Storage Facility.
- Service Buildings and Warehouse – construction, paint, HVAC, plumbing, electrical and sheet metal shops, garage, storage, and shipping/receiving department.
- Other University-owned buildings – research labs and offices (Sweeney, Snedecor, Vet. Med., etc.)

*University-owned buildings

4.1.1 Design Basis Threat/Risk Potential Matrix

Concurrent with site security planning and with the development of this plan, the Laboratory management has considered the strategies, objectives, and requirements stated in the unclassified version of DOE Design Basis Threat (DBT) Policy. Consistent with the graded approach advocated by the DBT and other DOE directives, the Ames security planning and property/personnel protection measures have been structured so as to adequately deal with the threats posed by the operations and environments that are extant or anticipated. This situation has been accomplished by making a thorough and objective analysis of the local site conditions, the factors and type of threats that bear

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	14 of 19	Review Date	7/15/07

upon the site, and the availability and proximity of university, civil, and federal support organizations and assets. Copies of MOUs with local public safety, fire protection, and medical organizations, which support the Laboratory's threat management strategy, are on file at Ames Laboratory. The specific threats that are applicable to Ames, their categorization (i.e., high, medium, and low) and the actions that have been taken and/or that are available for their mitigation are documented.

The Design Basis Threat Policy for DOE-CH Unclassified Facilities identifies six types of threat; Organized Criminals, Psychotics, Disgruntled Employees, Radical Activists, Foreign Agents, and White Collar Criminals. The likelihood of Type Involvement (identified from Ames Laboratory historical data) and Risk Potential (Low-Medium-High, identified from program impact and attractiveness levels determined on-site) are shown for the Ames Laboratory in the matrix below. The Laboratory is ranked as a Category IV facility.

THREAT TYPE	LIKELIHOOD OF TYPE INVOLVEMENT-RISK POTENTIAL		
	Not Likely	Possible	Probable
Organized Criminals	Low		
Psychotics	Low		
Disgruntled Employees	Low		
Radical Activists	Low		
Foreign Agents	Low		
White-Collar Criminals	Low		

Risk Potential is considered to be Low for all categories because of mitigation as described in Sections 4.2 through 4.4, which follow.

4.2 Physical Barriers

There are no man-made barriers (i.e. fences, walls, alarmed clear-zones, guard shacks, etc.) nor natural barriers (wooded areas, mounds, berms, etc.) at the Ames Laboratory site. The buildings (both federally-owned and leased) are integrally located with the general educational and research facilities of Iowa State University. The doors to all federally-owned buildings at the Ames Laboratory site are blank-locked to prevent entry, or entry is controlled by a Marlok electronic system or a standard key system during off-hours and weekends.

The physical controls maintained are consistent with the nature of the site, afford adequate protection of government property, and are acceptable in light of the fact that there is no classified work being conducted at Ames Laboratory.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	15 of 19	Review Date	7/15/07

4.3 Intrusion Detection System

Entrances to the federally-owned buildings at the Ames Laboratory site are equipped with change-of-state door sensors that can be activated during threat or potential threat conditions. These sensors are monitored electronically and by print media at the Central Alarm Station situated in the Plant Protection Section offices in G35 TASF.

The security officers of Plant Protection Section routinely tour federally-owned and leased space during off-hours and weekends. The Central Alarm Station monitors these tours. The Central Alarm Station is a Simplex 4120 system and consists of a cpu/monitor/printer array. Printouts are removed at the start of day shift Monday through Friday, and reviewed for reports/alarms and responses. Printouts are kept for one year.

Maintenance for the Central Alarm Station is performed by the manufacturer under contract or by trained Laboratory personnel. The maintenance schedule of the manufacturer is followed. Back-up power is provided through connection to an uninterruptible power supply. The nature of the intrusion detection system provides daily self-testing. Trouble messages are received if components fail and identified malfunctions are repaired. Testing documentation is provided by the printout and by copies of service orders.

Two-way radio, digital pagers and telephone communication equipment is used by the Plant Protection Section officers and selected members of the Emergency Team. One of the base stations is located in the Plant Protection Section office in G35 TASF. The office is also equipped with public address access and television, commercial-radio, and scanner-monitoring equipment.

4.4 Access Control/Protection Procedures

Access control is provided for all federally-owned buildings during periods outside normal working hours. All outer doors are either blank-locked or access is controlled by Marlok electronic lock systems. Metal grates cover window wells and all accessible windows are kept locked.

The exterior doors to Spedding and Wilhelm Halls, the Metals Development Building and TASF, through which after-hours access is made, are secured by a Marlok electronic security system. An individualized key pass is necessary to gain access. Standard and Marlok key control is maintained through regulated issue with appropriate authorization by Laboratory management and key check-in procedures during personnel out-processing. A hierarchical, standard key/lock system is maintained so that access to work areas can be matched to the key holder's legitimate need based upon assigned tasks and responsibilities.

Government-owned property is posted with notices that are consistent with the requirements of DOE Order 473.1 *Physical Protection Program, Section 4.c. (10)*. Unauthorized access to

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	16 of 19	Review Date	7/15/07

Laboratory facilities in leased space is detected by scheduled watch tours by the officers of the Plant Protection Section.

The Laboratory is authorized to possess Category IV quantities of special nuclear material. When not in use, not in process, or otherwise unattended; the material is under proper locked storage. The special nuclear materials are maintained in B53. Spedding, an alarmed space with very limited keyed access. The keyed door for this room is equipped with a balanced magnetic switch continuously monitored by the PPS. Access to this room is limited to the Ames Laboratory NMR, two health physics technicians, and the PPS Manager, Sergeants, and Officers.

4.5 Site Vulnerability Assessment

In 1991, the Ames Laboratory conducted a Vulnerability Assessment (VA). The format used data collected from the groups and departments within Ames Laboratory to assess the value and importance of real and personal property at the site. The same concept was used to revisit the subject in 1999, although the form was altered to allow database entry and additional data regarding flammable fuel loading. During 2005, the Ames Laboratory utilized the Lawrence Berkley National Laboratory's Building Vulnerability and Mitigation Program (BVAMP) as a method to identify and document system vulnerabilities. The assessment is documented in Plan 10201.002, Safeguards and Security Site Vulnerability Assessment.

4.6 Badging Program

The Ames Laboratory badge was designed according to DOE Office of Science guidelines. Ames Laboratory is an unclassified scientific and technical facility, with no identified Property Protection Areas (PPAs). The issuance, use, and control of the Ames Laboratory badge are managed consistent with policies, procedures, requirements and practices of Ames Laboratory. The badge is issued to employees and associates of Ames Laboratory, and used as an additional means of identification within Ames Laboratory and as an Ames Laboratory and DOE affiliation identifier for employees on official travel. Badges are subject to recall and return upon termination from Ames Laboratory. Ames Laboratory SECON status and the direction of Laboratory management dictate when wearing badges is mandatory. The design of the Ames Laboratory badge is consistent with the DOE Common Badge Program. The front of the badge consists of three zones: zone one includes the name of the site (Ames Laboratory), zone two includes a color photo of the employee and the Official DOE Emblem on a white background, and zone three is a white background with the employee's name and employee's identification number. The following statement is printed on the back of the badge in black ink, "If found, drop in any mailbox. Postmaster, postage guaranteed. Return to Ames Laboratory, 105 TASF, Ames Iowa 50011. Ames Laboratory is managed and operated by Iowa State University for the U.S. Department of Energy. This credential is the property of the U.S. Government. The counterfeit, alteration, or misuse is a violation of Section 499 and 701, title 18, United States Code."

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	17 of 19	Review Date	7/15/07

5.0 SECURITY FORCE AND CONTINGENCY PLANNING

5.1 Security Force

Ames Laboratory maintains a security force comprised of security personnel, referred to as Plant Protection Section (PPS) officers and sergeants. This force consists of unarmed uniformed personnel, not trained in weaponless self-defense and intermediate weapons, and is charged to observe, detect, and report physical plant security, industrial safety and fire protection incidents during their watch tours. They also support response by off-site emergency responders. Plant Protection Section (PPS) consists of three officers and three sergeants. The Section is divided into three shifts and provides coverage 24-hours a day, seven days a week. The PPS officers make scheduled watch tours of the Ames Laboratory site during non-working hours. Details of the duties of the PPS officers are provided in the Plant Protection Section procedures.

The PPS force is provided with core training in emergency response actions, physical security checks and reporting, Central Alarm Station operation and policies, and procedures necessary for the assignment. The force takes advantage of retraining and advanced training opportunities as provided by Iowa State University and the Ames Laboratory Training Section of the Environment, Safety, Health & Assurance Office. Ames Laboratory was granted a variance from the requirements of DOE Order 470.1, "Safeguards and Security Program", Chapter II, "Safeguards and Security Training Program", Paragraph 3, Subparagraph f: "The Training Approval Program (TAP)" on September 2, 2004.

The officers are equipped with a small flashlight, a cell phone, and a two-way radio or a radio-telephone. The officer can access the Local Law Enforcement Agencies (ISU Department of Public Safety and the Ames Police Department) via radio-telephone or two-way radio. The officers carry no other security equipment. ISU Department of Public Safety patrols the streets adjacent to Ames Laboratory buildings, although the nature and scope of the site obviate a specific need for such patrols.

The Ames PPS force is continually and effectively coupled to University and municipal law enforcement agencies. These Local Law Enforcement Agencies (LLEAs) will respond to any issue upon request. An MOU has been implemented with the University Department of Public Safety, which is the primary LLEA responder for the Ames site. The Laboratory will request police action from the University Department of Public Safety and/or Ames Police to resolve civil situations.

5.2 Standard Protection Procedures

The intrusion detection and prevention procedures described above help establish appropriate protection for the Government property and interests at the Ames site. These procedures are managed by the Laboratory PPS force and augmented by LLEAs as required. Property management/protection

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	18 of 19	Review Date	7/15/07

is also achieved by appropriate property marking and inventory procedures and by the maintenance of a lock/key-control program, approved by DOE-CH.

Small quantities of special nuclear materials are retained at the Ames site for basic research purposes. The inventory of these materials is secured in an alarmed space with very limited keyed access. Research is potentially performed with these materials in the Metals Development building, Spedding Hall, Zaffarano Physics Addition, and Wilhelm Hall. Further details of the Laboratory's nuclear materials safeguard procedures are provided in the Materials Control and Accountability Program Plan which was reviewed and approved in April 2004.

5.3 SECON and Other Responses

Ames Laboratory establishes specific responses to the current Security Condition (SECON) Level according to an internal process based on consideration of SECON measures defined in Attachment 3 of DOE N 473.9, Security Conditions. Ames has developed a listing of potential local responses to measures associated with SECON Levels 1 through 5. A representative group of the S&S Oversight Committee members meet and discuss the specifics associated with a specific SECON Level announcement, and determine appropriate responses. These responses are detailed in a SECON status notice and appropriate communications are undertaken with employees, building occupants, specific Iowa State University Offices, and the Ames Site Office.

Non-tactical response actions are taken by the PPS as necessary. A significant event at Ames Laboratory will trigger notification of the appropriate off-site responders and activation of the Ames Laboratory Emergency Plan. MOUs have been implemented with LLEAs, Mary Greeley Medical Center, and City of Ames Fire Department, and procedures are in place to integrate Ames Laboratory into the appropriate Incident Command System. In case of demonstrations, protests and civil disorder, the Laboratory may request police action from Iowa State University Department of Public Safety and other agencies as needed. Should a fire occur at the Laboratory, the City of Ames Fire Department will be called and the Ames Laboratory Emergency Plan will be activated. When the Fire Department responds and assumes command at a fire scene, the Fire Chief or his designated senior officer is in charge of fire suppression operations.

5.4 Contingency Planning

The S&S Oversight Committee will maintain cognizance of this plan and the requirements of the site as specified by applicable DOE Orders and local operations. The fact that high level representation is provided on the committee for all elements of Ames Laboratory's plant and facilities security functions guarantees an effective interface between this oversight-planning body and the operational segments of the security organization.

Ames Laboratory		Plan	10200.007
Office	Safeguards and Security	Revision	6
Title	Site Security Plan	Effective Date	7/15/05
Page	19 of 19	Review Date	7/15/07

6.0 STATUS, PLANNED IMPROVEMENTS AND CHANGE CONTROL

6.1 Status

No problems or vulnerabilities remain as open issues. Event reporting procedures are in place at Ames Laboratory that are consistent with DOE Order 232.1A, *Occurrence Reporting and Processing of Operations Information*, Noncompliance Tracking System (NTS) requirements, and with DOE Notice 471.3 *Reporting Incidents of Security Concern*. The Manager of Environment, Safety, Health and Assurance administers the process for determining the event category and for collecting the necessary information and development of reports.

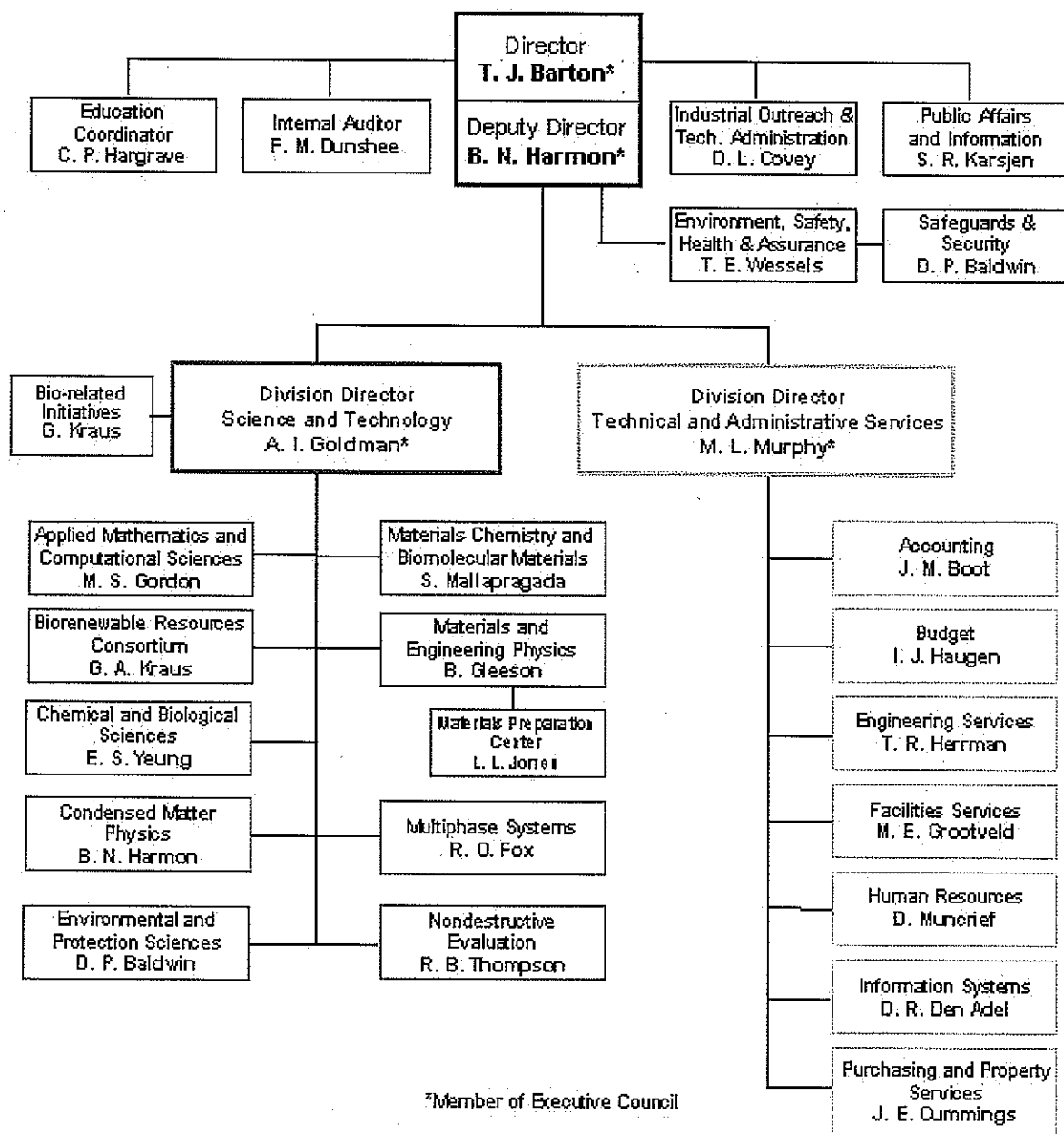
6.2 Change control

Revision 5 of the Ames Laboratory's Site Security Plan was approved by DOE, Ames Site Office and DOE-CH-SSS. Revision 6 of the Site Security Plan and revision 1 of the Safeguards and Security Vulnerability Assessment are pending review and approval by DOE. No additional major changes to the Program are planned. The S&S Oversight Committee will recommend minor upgrades of the Site Security Program, as the need is determined. The Laboratory will consider the merits of appropriate guidance statements for improvements to its protection program, as they are made available by DOE-CH.

Attachment A

Ames Laboratory Organizational Charts

Ames Laboratory Organization

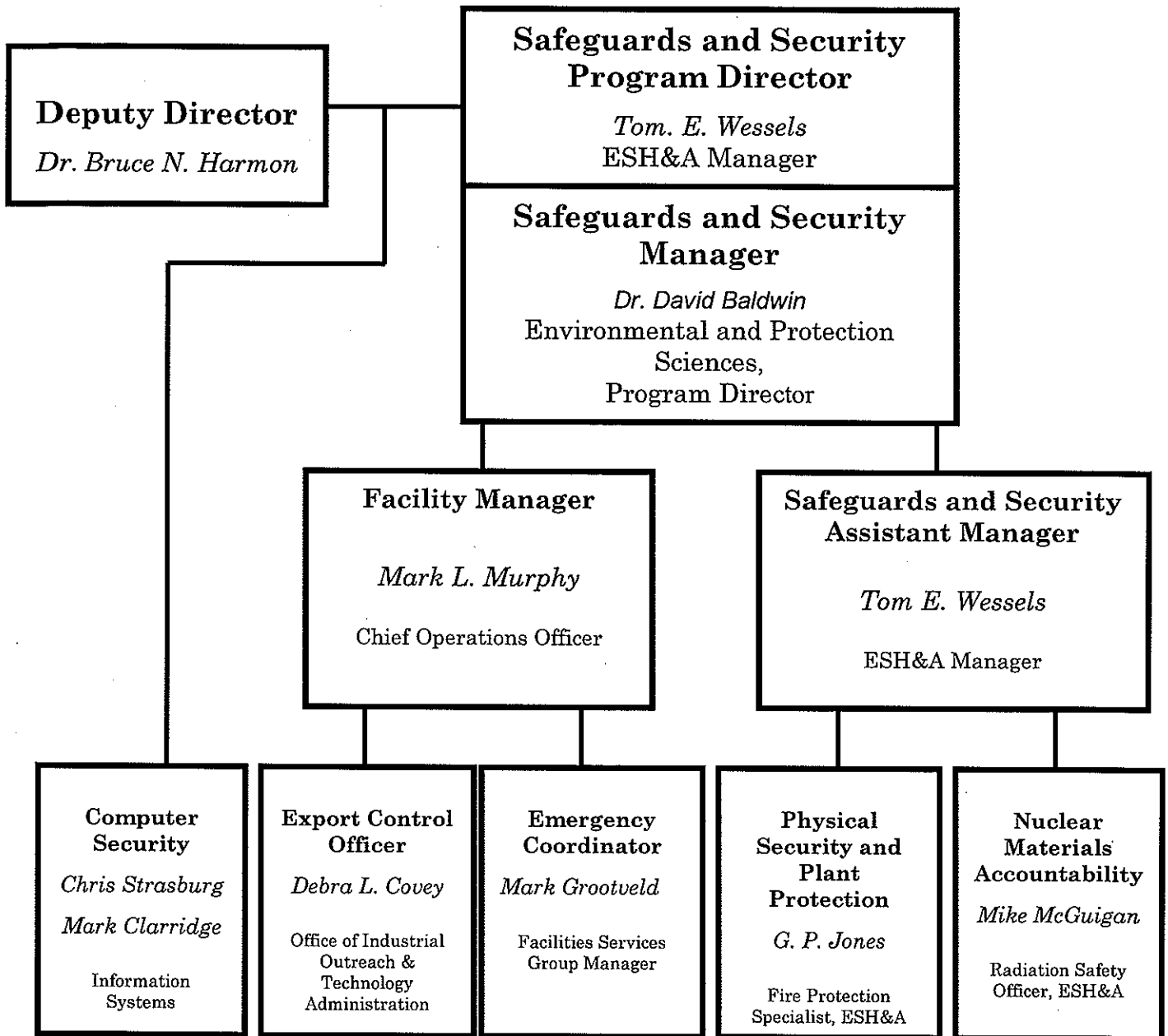


*Member of Executive Council

October 2004

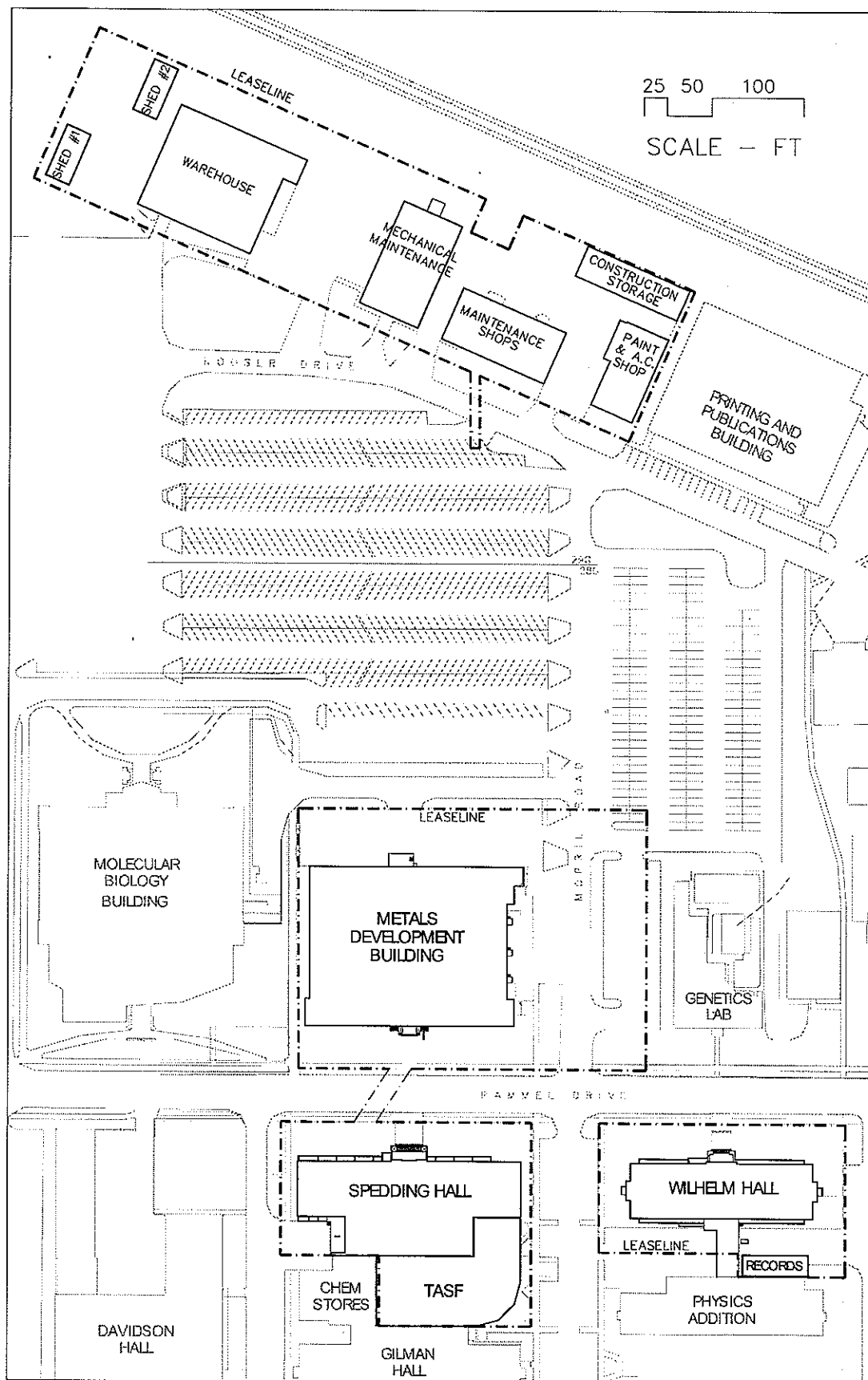
Ames Laboratory

Safeguards and Security Oversight Committee



Attachment B

Ames Laboratory Current Use Map



OFFICIAL USE ONLY